5-1079

QUEENSLAND JOURNAL OF AGRICULTURAL AND ANIMAL SCIENCES

Volume 33, 1976

PUBLISHED SIX-MONTHLY
By the Queensland Department of
Primary Industries, Brisbane,
Qld. 4000, Aust.

65800—S. R. HAMPSON, Government Printer, Brisbane

Digitized by the Internet Archive
in 2025

https://archive.org/details/queensland-journal-of-agricultural-and-animal-sciences_1976_33_index-contents

QUEENSLAND JOURNAL OF AGRICULTURAL AND ANIMAL SCIENCES

Volume 33, 1976

CONTENTS

No. 1 JUNE

	PAGE
Performance of ewes supplemented with a home-made, grain-based, protein supplement. R. T. F. Armstrong, D. M. Allison and R. D. Oakes	1
The effect of pregnancy and lactation on wool weight in a commercial Merino flock in southern Queensland. R. T. F. Armstrong and P. K. O'Rourke	9
Occurrence of salmonellas in raw and pasteurized liquid whole egg. B. Peel	13
The seasonal history and control of *Ceroplastes rubens* Maskell on citrus in south-east Queensland. D. Smith	23
Insecticides to control onion thrips (*Thrips tabaci* Lind.) P. D. Rossiter and K. J. Giesemann	31
Effect of various temperatures on development of the lucerne jassid *Austroasca alfalfae* (Evans) (Homoptera: Cicadellidae) with reference to population levels in lucerne. G. K. Waite	39
Competition between brigalow (*Acacia harpophylla*) suckers and establishing pastures following pulling and burning. R. W. Johnson	43
The economic status of lucerne jassids (*Austroasca* spp.) in south-eastern Queensland. G. K. Waite	67
Parasites of *Pieris rapae* L. in south-eastern Queensland. S. T. Hassan	73
Use of DDT in combination with endrin and parathion for controlling cotton pests in Queensland. J. W. Turner and L. W. Rigby	77
The types of Australian species of the subfamily Scelioninae (Hymenoptera: Scelionidae). I. D. Galloway	83
A device for procuring undisturbed cores of cracking-clay soils. R. D. Berndt, W. M. Strong and E. T. Craswell	115
A motorized sieve for sampling soil-dwelling larvae. J. W. Turner	121
Insecticide control of three grass-feeding *Noctuids* and *Herpetogramma licarsisalis* (Walk.) R. J. Elder	125
Studies on tuber stem end rot and stem rot of potato in north Queensland caused by *Fusarium solani* and *Fusarium oxysporum*. W. Pont	129
An outbreak of the leaf bagworm *Hyalarcta huebneri* (Westwood) (Lepidoptera: Psychidae) in forest plantations of *Pinus radiata* in Queensland N. W. Heather	145

No. 2 DECEMBER

PAGE

Resistance of maize to field infestation by *Sitophilus zeamais* Motschulsky and *Sitotroga cerealella* (Olivier). J. W. Turner 155

An automated method for determining nitrate-nitrogen in soil extracts. E. K. Best .. 161

Performance of the apple cultivar Jonathan on clonal rootstocks in southern Queensland. B. C. Dodd 167

Some effects of nitrogen on seed production of *Setaria anceps* cv. Nandi. S. L. Stillman and W. R. Tapsall 173

A review of dieback—a disorder of the papaw (*Carica papaya* L.) in Queensland. J. D. Glennie and K. R. Chapman 177

Levels of moisture, oil, nitrogen and fatty acids in the maturing seed of sunflower (*Helianthus annuus*). B. W. Simpson and B. J. Radford 189

Effect of EPTC on emergence and growth of lucerne. S. R. Walker 203

The performance of the apple cultivar Delicious on Merton and other clonal rootstocks in southern Queensland. A. M. Hibberd and B. C. Dodd 207

Effect of biuret, grain and mineral mixture on the intake and liveweight performance of weaner steers. A. J. Ernst, J. F. Linpus, P. K. O'Rourke and I. D. Loxton 213

The effect of urea-molasses supplementation on liveweight, wool production and reproductive performance of Merino ewes grazing poor quality native pasture. P. S. Beasley and N. P. McMeniman 223

Identification of cattle using roller lickers. I. D. Doherty 229

The serological and microscopic monitoring of a natural outbreak of eperythrozoon infection in sheep. K. N. Daddow and L. B. Dunlop 233

INDEX TO VOLUME 33

A

PAGE

Acacia harpophylla, (brigalow), competition with pastures following pulling and burning 43

Allison, D. M. (with R. T. F. Armstrong and R. D. Oakes)—
'Performance of ewes supplemented with a home-made, grain-based protein supplement' 1

'A device for procuring undisturbed cores of cracking-clay soils' 115

'A motorized sieve for sampling soil-dwelling larvae' 121

'An automated method for determining nitrate-nitrogen in soil extracts' 161

An outbreak of the leaf bagworm *Hyalarcta huebneri* (Westwood) (Lepidoptera: Psychidae) in forest plantations of *Pinus radiata* in Queensland' 145

Apple—
cultivar Delicious on clonal rootstocks 207
cultivar Jonathan on clonal rootstocks 167

'A review of dieback—a disorder of the papaw (*Carica papaya L.*) in Queensland' .. 177

Armstrong, R. T. F. (with D. M. Allison and R. D. Oakes)—
'Performance of ewes supplemented with a home-made, grain-based, protein supplement' 1

Armstrong R. T. F. (with P. K. O'Rourke)—
'The effect of pregnancy and lactation on wool weight in a commercial Merino flock in southern Queensland' 9

Austroasca alfalfae—
economic status 67
effect of temperature on population 39

B

Beasley, P. S. (with N. P. McMeniman)—
'The effect of urea-molasses supplementation on liveweight, wool production and reproductive performance of Merino ewes grazing poor quality native pasture' 223

Berndt, R. D. (with W. M. Strong and E. T. Craswell)—
'A device for procuring undisturbed cores of cracking-clay soils' 115

Best E. K.—
'An automated method for determining nitrate-nitrogen in soil extracts' 161

C

Cattle—
identification with roller lickers 229
weaner steers; biuret, grain and mineral mixture on performance 213

Ceroplastes rubens, control on citrus 23

Chapman, K. R. (with J. D. Glennie)—
'A review of dieback—a disorder of the papaw (*Carica papaya L.*) in Queensland' .. 177

Citrus, control of *Ceroplastes rubens* 23

'Competition between brigalow (*Acacia harpophylla*) suckers and establishing pastures following pulling and burning' 43

Cotton, pest control 77

Craswell, E. T. (with R. D. Berndt and W. M. Strong)—
'A device for procuring undisturbed cores of cracking-clay soils' 115

D

PAGE

Daddow, K. N. (with L. B. Dunlop)—
'The serological and microscopic monitoring of a natural outbreak of eperythrozoon infection in sheep' 233

Dieback, a review of the disorder in papaw (*Carica papaya*) 177

Doherty, I. D.—
'Identification of cattle using roller lickers' 229

Dodd, B. C.—
'Performance of the apple cultivar Jonathan on clonal rootstocks in southern Queensland' 167

Dodd, B. C. (with A. M. Hibberd)—
'The performance of the apple cultivar Delicious on Merton and other clonal rootstocks in southern Queensland' 207

Dunlop, L. B. (with K. N. Daddow)—
'The serological and microscopic monitoring of a natural outbreak of eperythrozoon infection in sheep' 233

E

Effect of biuret, grain and mineral mixture on the intake and liveweight performance of 'weaner steers' 213

'Effect of EPTC on emergence and growth of lucerne' 203

'Effect of various temperatures on development of the lucerne jassid *Austroasca alfalfae* (Evans) (Homoptera: Cicadellidae) with reference to population levels in lucerne' 39

Egg, salmonellas 13

Elder, R. J.—
'Insecticide control of three grass-feeding *Noctuids* and *Herpetogramma licarsisalis* (Walk.)' 125

Ernst, A. J. (with J. F. Limpus, P. K. O'Rourke and I. D. Loxton)—
'Effect of biuret, grain and mineral mixture on the intake and liveweight performance of weaner steers' 213

F

Fusarium, potato rots 129

G

Galloway, I. D.—
'The types of Australian species of the subfamily Scelioninae (Hymenoptera: Scelionidae)' 83

Giesemann, K. J. (with P. D. Rossiter)—
'Insecticides to control onion thrips (*Thrips tabaci* Lind.)' 31

Glennie, J. D. (with K. R. Chapman)—
'A review of dieback—a disorder of the papaw (*Carica papaya* L.) in Queensland' .. 177

H

PAGE

Hassan, S. T.—
'Parasites of *Pieris rapae* L. in south-eastern Queensland' 73

Heather, N. W.—
'An outbreak of the leaf bagworm *Hyalarcta huebneri* (Westwood) (Lepidoptera: Psychidae) in forest plantations of *Pinus radiata* in Queensland' 145

Helianthus annuus, (sunflower) chemicals in seed 189

Herpetogramma licarsisalis, control 125

Hibberd, A. M. (with B. C. Dodd)—
'The performance of the apple cultivar Delicious on Merton and other clonal rootstocks in southern Queensland' 207

Hyalarcta huebneri, (bagworm) in *Pinus radiata* 145

I

'Identification of cattle using roller lickers' 229

'Insecticide control of three grass-feeding *Noctuids* and *Herpetogramma licarsisalis* (Walk)' 125

'Insecticides to control onion thrips (*Thrips tabaci* Lind.)' 31

J

Johnson, R. W.—
'Competition between brigalow (*Acacia harpophylla*) suckers and establishing pastures following pulling and burning' 43

L

'Levels of moisture, oil, nitrogen and fatty acids in the maturing seed of sunflower (*Helianthus annuus*)' 189

Limpus, J. F. (with A. J. Ernst, P. K. O'Rourke and I. D. Loxton)—
'Effect of biuret, grain and mineral mixture on the intake and liveweight performance of weaner steers' 213

Loxton, I. D. (with A. J. Ernst, P. K. O'Rourke and J. F. Limpus)—
'Effect of biuret, grain and mineral mixture on the intake and liveweight performance of weaner steers' 213

Lucerne—
EPTC on emergence and growth 203
jassid, economic status 67
jassid, effect of temperature on population 39

M

McMeniman, N. P. (with P. S. Beasley)—
'The effect of urea-molasses supplementation on liveweight, wool production and reproductive performance of Merino ewes grazing poor quality native pasture' .. 223

Maize, resistance to *Sitophilus zeamais* and *Sitotroga cerealella* 155

N

PAGE

Noctuids, control 125

O

Oakes, R. D. (with R. T. F. Armstrong and D. M. Allison)—

'Performance of ewes supplemented with home-made, grain-based protein supplement' 1

'Occurrence of salmonellas in raw and pasteurized liquid whole egg' 13

Onion thrips, control 31

O'Rourke, P. K. (with R. T. F. Armstrong)—

'The effect of pregnancy and lactation on wool weight in a commercial Merino flock in southern Queensland' 9

O'Rourke, P. K. (with A. J. Ernst, J. F. Limpus and I. D. Loxton)—

'Effect of biuret, grain and mineral mixture on the intake and liveweight performance of weaner steers' 213

P

Papaw (*Carica papaya*) review of dieback 177

'Parasites of *Pieris rapae* L. in south-eastern Queensland' 73

Peel, B.—

'Occurrence of salmonellas in raw and pasteurized liquid whole egg' 13

'Performance of ewes supplemented with home-made, grain-based, protein supplement' 1

'Performance of the apple cultivar Jonathan on clonal rootstocks in southern Queensland' 167

Pieris rapae, parasites of 73

Pinus radiata, outbreak of *Hyalarcta huebneri* in plantations 145

Pont, W.—

'Studies on tuber stem end rot and stem rot of potato in north Queensland caused by *Fusarium solani* and *Fusarium oxysporum*' 129

Potato, tuber stem end rot and stem rot 129

R

Radford, B. J. (with B. W. Simpson)—

'Levels of moisture, oil, nitrogen and fatty acids in the maturing seed of sunflower (*Helianthus annuus*)' 189

'Resistance of maize to field infestation by *Sitophilus zeamais* Motschulsky and *Sitotroga cerealella* (Olivier)' 155

Rigby, L. W. (with J. W. Turner)—

'Use of DDT in combination with endrin and parathion for controlling cotton pests in Queensland' 77

Rossiter, P. D. (with K. J. Giesemann)—

'Insecticides to control onion thrips (*Thrips tabaci* Lind.)' 31

S

PAGE

Scelioninae, types of species in 83

Setaria anceps, nitrogen on seed production 173

Sheep—
eperythrozoon infection, serological and microscopic monitoring 233
pregnancy and lactation on wool weight 9
protein supplement for ewes 1
urea-molasses supplementation on Merino ewes 223

Simpson, B. W. (with B. J. Radford)—
'Levels of moisture, oil, nitrogen and fatty acids in the maturing seed of sunflower (*Helianthus annuus*)' 189

Soil, nitrate-nitrogen determination, automatic 161

Soils, device for procuring undisturbed cores 115

Smith, D.—
'The seasonal history and control of *Ceroplastes rubens* Maskell on Citrus in south-east Queensland' 23

'Some effects of nitrogen on seed production of *Setaria anceps* cv. Nandi' 173

Stillman, S. L. (with W. R. Tapsall)—
'Some effects of nitrogen on seed production of *Setaria anceps* cv. Nandi' 173

Strong, W. M. (with R. D. Berndt and E. T. Craswell)—
'A device for procuring undisturbed cores of cracking-clay soils' 115

'Studies on tuber stem end rot and stem rot of potato in north Queensland caused by *Fusarium solani* and *Fusarium oxysporum*' 129

Sunflower, chemicals in maturing seed 189

T

Tapsall W. R. (with S. L. Stillman)—
'Some effects of nitrogen on seed production of *Setaria anceps* cv. Nandi 173

'The economic status of lucerne jassids (*Austroasca* spp.) in south-eastern Queensland' 67

'The effect of pregnancy and lactation on wool weight in a commercial Merino flock in southern Queensland' 9

'The effect of urea-molasses supplementation on liveweight, wool production and reproductive performance of Merino ewes grazing poor quality native pasture' .. 223

The performance of the apple cultivar Delicious on Merton and other clonal rootstocks in southern Queensland' 207

'The seasonal history and control of *Ceroplastes rubens* Maskell on citrus in south-east Queensland' 23

'The serological and microscopic monitoring of a natural outbreak of eperythrozoon infection in sheep' 233

'The types of Australian species of the subfamily Scelioninae (*Hymenoptera*: *Scelionidae*)' 83

Thrips, control on onion 31

Turner, J. W.—
'A motorized sieve for sampling soil-dwelling larvae' 121

Turner, J. W.—
'Resistance of maize to field infestation by *Sitophilus zeamais* Motschulsky and *Sitotroga cerealella* (Olivier)' 155

Turner, J. W. (with L. W. Rigby)—
'Use of DDT in combination with endrin and parathion for controlling cotton pests in Queensland' 77

U

PAGE

'Use of DDT in combination with endrin and parathion for controlling cotton pests in Queensland' 77

W

Waite, G. K.—
'Effect of various temperatures on development of the lucerne jassid *Austroasca alfalfae* (Evans) (Homoptera: Cicadellidae) with reference to population levels in lucerne' 39

Waite, G. K.—
'The economic status of lucerne jassids (*Austroasca* spp.) in south-eastern Queensland' 67

Walker, S. R.—
'Effect of EPTC on emergence and growth of lucerne' 203

65800—S. R. HAMPSON, Government Printer